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HOW TO SOLVE THE INDUSTRIAL PROBLEM

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THE industrial problem has been solved by the ants, but it can not be solved by man. Ants are abundantly preserved in Baltic amber, belonging to a period about two million years ago, and it appears that they did then pretty much what they do to-day. Their industrial system is fixed for very long periods of time, without any necessity for progress. It is highly successful; the ants literally own the earth. Ant behavior is dominated by instinct, and ants not only can not go on strike, they can not wish to do so.

During the greater part of man's history, he also was unprogressive. For many centuries he lived in caves, hunting wild animals for food, and clothing himself in their skins. He knew the mammoth, and left us drawings showing its hairy majesty. He had no industrial problem, because he was little socialized, and knew nothing of machinery.

In course of time pictorial writing evolved into written language, with an alphabet. Discoveries and inventions were thus recorded, and the knowledge of them was preserved for posterity. Each generation added its wisdom to that of all previous ones, and progress became normal. No man stood exactly in his father's shoes, he was a little more advanced along the road of human development.

This principle of progress was not properly recognized or accepted for a long while. The rate of change was very uneven, and in some cases quite imperceptible. In religion and philosophy it was customary to refer always to the learning of the ancients, and thought was only subconsciously modified. That it really was affected by experience, in spite of all efforts to keep it static, is shown by the various reforms. The wine was new, and at length the old bottles burst. Even then, there was often a pretense of going back to past ideas, instead of a frank recognition of forward development.

It is a singular thing that systems of ideas ran ahead of their application to practical problems. The thoughts of cave men were embodied in clever drawings, not in inventions. It is true that the early applications of scientific principles made it possible to build the pyramids, but the early philosophies far transcend any mere utilitarianism. There was a surplus of mental power, which delighted in exercising itself. Because this appeared to be the highest expression of human personality, it came to be held that mere practical purposes were somehow lower and inferior.

Discoveries and inventions emerged, often by a kind of accident. It sometimes seemed that necessity was not so much the mother of invention, as the reverse. All this paralleled in a way the evolution of life in general, which proceeds through the selection of variations which were not purposeful in their origin.

The industrial problem really began when manufacture reached a stage in which two or more had to cooperate to produce. The smith was the type of the original manufacturer, literally the one who made things by hand. His skill was individual, yet even he had to be provided with metal. His magic blade, endowed it seemed with supernatural power, owed its qualities to the invention of steel. It was discovered that coal greatly facilitated the making of metal tools, and this new fuel came into general use in spite of opposition. In those days a prophet, endowed with a knowledge of the future, might have sounded a warning. He might have pointed out that a day would come when through the use of coal mighty machines would be constructed. These would require many men for their manufacture, many others to use them. The mining of coal would become a great industry, requiring hundreds of thousands of men. In these ways great deeds would become possible, but the individual would be submerged in the organization. In a true sense, man would be conquered by machinery, as the Erewhonians in Butler's fanciful story maintained. Could all this have been clearly foreseen, it is conceivable that the people might have acted as the Erewhonians, and destroyed all machines, making it a criminal offense to have one in possession. At the very least, they would have wished to do as William Morris said they must, make a bargain with the machine. It must be frankly recognized that the organization of industry, with all its benefits, is not without inherent disadvantages,—disadvantages which cannot be entirely removed. Personal liberty and initiative are restricted; since many are involved, all must play according to the rules of the game. The great question is, how far is it worth while to go in this direction? If a nation of people acting cooperatively as a unit could secure abundant wealth for all, would it be worth while?

We object to militarism, not only because it leads to war, but also because it enslaves the people. It reduces the individual as such, to the lowest possible terms, excepting only those in command. Our American boys, while the war was on, took things as they came, with a good heart. But now the war is over, we begin to discover what they thought about a number of things. Most of them seem to definitely object to the militaristic system, as a system. Certain officers may have been stupid or harsh, but that is not the real trouble. The trouble is, that men are deprived of the amount of liberty and the pursuit of happiness to which they feel entitled.

It is easy for the average American to understand this, because with us militarism is after all an exotic affair. It has never become natural for us, as it has for the Germans. But it takes very little intelligence to reason from this example to the conditions in the industrial world. Labor unions complain that if they are denied by injunction the right to strike they are virtually enslaved. In spite of the industrial organization, we have kept up a pretense of perfect liberty to work or not, as one likes. Theoretically, and according to common law, a man may seek employment where and when he pleases, or may refuse it. This alleged fact is constantly cited by those who wish to maintain that our ancient liberties have not been impaired. Practically, however, the working man is in a condition of bondage, sometimes called wage-slavery. He is part of an organization, part of a machine. It is impossible for him to be a really free agent, and his employer is hardly in a better case. This is not hypothetical, it is actually a fact. It necessarily results from the increasing complexity of organization involved in the advance of civilization. Industrial progress moves in this direction, and no thinking person is hardy enough to believe that the current can be reversed. The recent coal strike exposed the actual situation very completely. The affairs of this nation are now so thoroughly integrated that the cessation from work of a very small percentage of men may prove absolutely calamitous, just as if some essential part had been lost out of a machine. The government is practically driven to the position of denying the right to strike in this manner, while all the time making excuses and clinging to the verbal doctrine of liberty. The workers are not slow to perceive the incongruity.

Historians will probably record, in criticism of the present age, that whereas we had been brought by the logic of events to a certain position, we failed to get our bearings. Failing thus, we were slow to move in the right direction, and our blindness and inertia made death or misery for millions. This seems a harsh criticism, but are we sincerely trying to think out our problems, and act intelligently? Are we even honestly facing the facts? Do we realize that times are changing, and must change, in the nature of things? Are we estimating prosperity in terms of human welfare, or in terms of inanimate dividends? Do we really know or care much about the results of our actions? These are not very original criticisms, but they are pertinent. Perhaps the first great fact we have to face is this—that the organization of human affairs must and should extend not only within the nation, but between the nations. This organization, guided by science and democratically controlled, will enormously increase our power of production and transportation. It will create wealth for all, and do away with many of the worst terrors of disease. It may even improve the human stock, and create a posterity which will look back in amazement to the feeble folk of to-day. Every day opens up some new avenue of advance, reveals some new ray of hope. We are already so accustomed to many facilities our fathers never dreamed of, that we can hardly imagine ourselves without them. We rejoice in these gains, but all the time we are being drawn into a great world game, to be played by world rules, and not as we choose. The League of Nations is simply an attempt to frankly recognize the inevitable. The old liberty of the individualist, in respect to these matters, is departing.

Are we therefore bound by the bonds of a Marxian fatalism—destined to be puppets of a completely socialistic state? The profiteer, the tyrannical capitalist, these are surely mere diseases of the system: but the system itself, when completely democratized, must dominate the individual. We will cure the diseases, but can we alter the patient's constitution?

It seems to me that the dilemma, if fairly faced, might lose most of its terrors. Grant increasing interdependence, and deny the right to strike; what then? First of all, I should say that with modern science, modern machinery, there is no valid reason for not producing all the basic necessities for human welfare. There is no valid reason for not making the hours of labor reasonably short and the conditions healthful. The state, which in the modern sense requires the services of all, is under obligation to attend to these matters. It is the duty of the state to establish a standard of living, and see that all industries reasonably conform to it, in respect to all the workers. The time has long passed when the individual could do this for himself; it can only be done through community action.

Scientific research into social conditions should become a leading public function, and every industry should be watched, as a captain watches his ship at sea. Real justice should only be limited by ability and the bounty of nature. All this might come about under and through organization; it represents the real advantages of that process. Under such conditions, strikes would appear as meaningless as a refusal to come to meals, and the workers' welfare would be better cared for by experts than it could be through the operations of his will.

Bellamy pictured some such millennium in his "Looking Backward." Morris rebelled, and socialist though he was, would have none of it. He accordingly wrote the charming "News from Nowhere" as an antidote. Most Americans, reading both books, would probably confess a leaning toward the opinions of Morris. We don't want to be bound, even by golden chains, and we are well convinced that the process would endanger what we regard as the highest human attributes. Is there no better way out? It may well come through science and organization itself. The working day, if by that we mean the period of obligatory service, may be reduced to six hours or less. Inventions and improvements are rapidly increasing production per labor hour. Thus through bondage we may win our way to all the liberty we need. Half our active hours may be ours alone, to do as we please within generous limits. In this wide field of opportunity we may develop personality, and enjoy the sense of initiative. From the standpoint of national progress, these may well be the most fruitful hours of our lives, wherein we shall leap boundaries and set new marks. But the pitiful thing is, that we are as yet little fitted for these golden opportunities. Who can say that the free time of most people is well spent? Suppose the nation were put to-morrow on a universal six hour basis, would the result be good? It would in any event be much better than the twelve hours of the steel industry, but how many of us could profitably employ so much freedom from restraint? Idleness is destructive of character, and meaningless occupation is little better. There is actual danger that we may succumb to the effects of habitual constraint, so that we can not use a large margin of liberty.

If the present aims of the working classes are substantially gained, as they surely will be, it will be no small task to realize the full benefits. Educational processes must develop the power to play as well as work, if by play we mean free and self-directed occupation. Power of initiative must be deliberately cultivated, but also judgment as to when it may be properly employed. If we are successful, we may see within the next hundred years an intellectual and spiritual development far transcending anything yet imagined. Yet this may only be if we have a program, and deliberately set ourselves to realize it.

At that time, the industrial question will have been solved, in so far as we shall have attained an adequate *modus vivendi.* But it will never be solved as it is for the ant, because each generation will face new problems. Human society under the conditions of civilization is dynamic, and its gods may never slumber.

In the new day to come, it may seem probable that the bound time will appear so much less interesting than the free time, that its duties will be shirked. I do not think it will be so, as there will not only be the incentive of public service and universal benefit, but also the joy of *skill.* The things we do many times are those in which we develop skill, and consequently the worker in his bound hours will work efficiently, with relative ease and self-respect. In his free hours he will experiment and blunder, and continually realize his imperfections and limitations. The notable gains of the free hours will far transcend these of the bound, but they will be the survivors among many unsuccessful attempts.